

Notice of Allowability

Application No.

10/799,757

Examiner

LaTanya Bibbins

Applicant(s)

NAKANO, JUN

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 09 April 2007.
2. ☒ The allowed claim(s) is/are 1 and 2.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

WAYNE YOUNG
SUPERVISORY PATENT EXAMINER

DETAILED ACTION

Allowable Subject Matter

1. Claims 1 and 2 are allowed.
2. The following is an examiner's statement of reasons for allowance:

Regarding claims 1 and 2, while the prior art teaches a focus searching method and/or an optical disc device "storing in advance a temporarily set lens bottom point voltage corresponding to a temporarily set lens bottom point temporarily set at a lower position that has more sufficient room than a predetermined working distance of the objective lens, and a temporarily set lens top point voltage corresponding to a temporarily set lens top point temporarily set at a position slightly before the objective lens abuts on the beam incident surface of the optical disc and obtaining a focus search driving voltage corresponding to the signal surface of the optical disc based on the detection information from the photodetector when the objective lens is focused on the signal surface of the optical disc in the middle of raising or lowering the objective lens placed on standby at the lens midpoint between the temporarily set lens bottom point and the temporarily set lens top point based on the temporarily set lens bottom point voltage and a temporarily set lens top point voltage," none of the references of record, alone or in combination, suggest or fairly teach a focus searching method and/or an optical disc device **"obtaining a lens bottom point voltage and a lens top point voltage at the time of device starting by an arithmetic operation program based on the focus search driving voltage and a predetermined factor, and setting the lens bottom point corresponding to the lens bottom point voltage to be nearer to**

the lens midpoint side than the temporarily set lens bottom point while setting the lens top point corresponding to the lens top point voltage to be nearer to the lens midpoint side than the temporarily set lens top point” in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Citation of Relevant Prior Art

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Shimamura et al. (US PGPub Number 2001/0026506 A1) discloses a disc player and focus search control method with a storage section that contains a focus search table which stores waveform information in order to selectively set a plurality of focus search signals (see the discussion in paragraphs [0036], and [0047]-[0049] and Figures 4(a) to 4(c) where the focus search table contains predetermined peak, bottom, and central voltages which correspond to the respective focus positions of the objective lens; the peak and bottom voltages are equivalent to the claimed temporarily set lens top point and bottom point voltages and a focus search signal generating section which generates a focus search signal based on the selected waveform and supplies the generated focus search signal to the driver (seep paragraph [0038]). Shimamura,

however, fails to teach setting the lens bottom point corresponding to the lens bottom point voltage to be nearer to the lens midpoint side than the temporarily set lens bottom point while setting the lens top point corresponding to the lens top point voltage to be nearer to the lens midpoint side than the temporarily set lens top point.

Kelbas et al. (US PGPub Number 2004/0130980 A1) discloses an adaptive focusing method and apparatus where

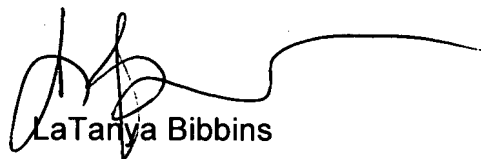
the pickup head falls from the optical disc to a minimum value of a focus drive signal and rises close to the optical disc and then to a maximum allowable value of the focus drive signal during a focus search operation. When the pickup head reaches the maximum allowable value of the focus drive signal, the pickup head falls from the optical disc to a minimum allowable value of the focus drive signal (see Figure 4 and the discussion in paragraph [0036] where FODTOPMARGN and FOTBOTMARGN correspond to maximum and minimum values of a focus drive signal and are equivalent to the claimed temporarily set lens top point and bottom point voltages). There are also FOUT_MAX and FOUT_MIN which correspond to maximum and minimum focus search voltages. Kelbas, however, fails to teach setting the lens bottom point corresponding to the lens bottom point voltage to be nearer to the lens midpoint side than the temporarily set lens bottom point while setting the lens top point corresponding to the lens top point voltage to be nearer to the lens midpoint side than the temporarily set lens top point.

Conclusion

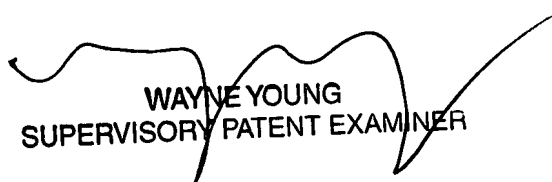
Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaTanya Bibbins whose telephone number is (571) 270-1125. The examiner can normally be reached on Monday through Friday 7:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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